IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Timo Kars van den Berg et al.	)	Attorney Docket No. 080743235001
Serial No.: 10/007,275	)	
Filed: October 26, 2001	)	
For: METHOD FOR INHIBITING CELL FUNCTIONING FOR USE IN ANTI-INFLAMMATORY AND ANTI-TUMOR THERAPIES	)	
Examiner: Yaen, Christopher H.	)	
Group Art Unit: 1642	)	
Confirmation No.: 5284	)	

REMARKS

Claims 3-7 have been cancelled currently, claims 2, 9 and 10 have been previously cancelled and claims 11 to 14 have been previously withdrawn. Therefore, only claims 1 and 8 are now in the application.

In paragraph 4 of the Office Action, claims 1 and 8 were found to be objectionable because of the use of both "microphages" and "macrophages". This has been corrected by referring only to "macrophages".

In paragraph 5 of the Office Action, claim 8 was rejected under section 112, first paragraph, for lacking enablement because of the unavailability of the specified antibodies. Please be advised that the hybridoma cells producing the antibodies ED9 and ED17 are deposited at the European Collection of animal Cell Cultures (ECACC) under ECACC numbers 95110626 (ED 9) and 95110627 (ED 17), so that the deposited material is available to the public.

In paragraph 6 of the Office Action, claims 1 and 8 stand rejected under section 112 as lacking enablement. This rejection is respectfully traversed.

Contrary to the Office Action, it is generally accepted that the results of in-vitro experiments have a well-predictive value for in-vivo application. The following references are examples thereof:

-K. Ichikawa et al.; J. Immunol. 2003, Jul. 15; 171 (2): 1061-9; "TRAIL-R2 (DR5) mediates apoptosis of synovial fibroblasts in rheumatoid arthritis";

-W.W. Shuford et al.; J. Exp. Med. 1997, Jul. 7; 186(1): 47-55; "4-1BB costimulatory signals preferentially induce CD8+ T cell proliferation and lead to the amplification in vivo of cytotoxic T cell responses";

-R.M. Hoek et al.; Science 2000, Dec. 1; 290(5497): 1768-71; "Down-regulation of the macrophage lineage through interaction with OX2(CD200);

-G.J. Wright et al.; Immunity 2000, Aug. 13(2): 233-42; "Lumphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function".

Further, it should be realized, that especially during the last decade in Europe animal experiments, i.e. experiments in which test animals are used and consequently terminated, are considered amoral and even socially unacceptable, except in special cases. Therefore, European scientists resort as far as possible to in-vitro experiments.

It is believed that the present claims do not contain any subject matter which is not described in the specification in such a way as to reasonably convey to a person skilled in the art that the inventors at the relevant filing date of the application had possession of the invention as claimed.

The various factors being useful to determine if the specification is enabling are set forth in *In re Wands*, 8 U.S.P.Q.2d 1400, 1404 (Fed. Cir. 1988). These factors include: (1) the quantity of experimentation necessary; (2) the amount of direction or guidance presented; (3) the presence or absence of working examples; (4) the nature of the invention; (5) the state of the

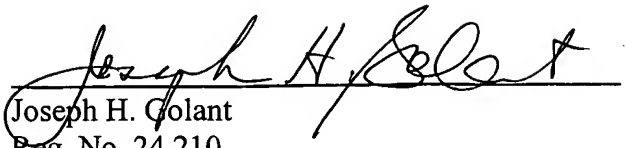
prior art; (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art; and (8) the breadth of the claims. However, it is not necessary that all the *Wands* factors be reviewed to find a disclosure enabling. The factors are illustrative, not mandatory. See in this connection, *Amgen, Inc. v. Chugai Pharmaceutical Co., Ltd.*, 18 U.S.P.Q.2d 1016 (Fed. Cir.), cert. denied 112 S.Ct. 169 (1991). Furthermore the necessity of some experimentation does not constitute lack of enablement as long as the experimentation is not unduly extensive. See *Atlas Powder Co. v. E.I. duPont Nemours & Co.*, 224 U.S.P.Q 409 (Fed. Cir. 1984). See also in this connection, page 5, line 1 to page 6, line 1 of the specification. Because it is unnecessary that all of the *Wands* factors be present, the lack of in-vivo working examples in the specification is alone not enough reason to conclude that the disclosure is not enabling for a therapeutic method practiced on the body of a living being. The other factors must also be reviewed. Concerning *Wands* factor (4) (the nature of invention) the present invention is directed to medical arts, a quite difficult art to be investigated by most scientists. As can easily be understood in the specification, the invention is relatively clear and straightforward.

There are existing U.S. patents wherein no in-vivo data is presented: 5,601,800 (in-vitro data is also lacking); 5,620,675; 5,776,894; and 5,746,966 (in-vitro data is also lacking). These cited patents, despite the lack of disclosure of in-vivo data or any specified guidance on how the inventions would actually be used clinically, are a clear indication that the U.S.P.T.O. is of the opinion that any missing information is something that a skilled person could easily fill in. This would require some experimentation, but such experimentation is routine and the lack of such data does not render the disclosure not enabling.

In view of the above, the applicants respectfully request that the subject application be passed to allowance.

Dated: March 2, 2004

Respectfully submitted,



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